Claims

1. A serine protease inhibitor of formula (I):

$$R_2$$
 $X$ 
 $Y$ 
 $L$ 
 $Lp(D)_n$ 
 $(I)$ 

wherein:

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 $R_2$  is a 5 or 6 membered aromatic carbon ring optionally interrupted by a nitrogen, oxygen or sulphur ring atom, 10 optionally being substituted in the 3 and/or 4 position (in relation to the point of attachement of X-X) by halo, nitro, thiol, haloalkoxy, hydrazido, alkylhydrazido, amino, cyano, haloalkyl, alkylthio, alkenyl, alkynyl, acylamino, tri or difluoromethoxy, carboxy, acyloxy, MeSO2- or R1, or the 15 substituents at the 3 or 4 positions taken together form a fused ring which is a 5 or 6 membered carbocyclic or heterocyclic ring optionally substituted by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or  $R_{1\dot{1}}$ , and optionally substituted in the position 20 alpha to the X-X group (i.e. 6 position for a six membered aromatic ring etc) by amino, hydroxy, halo, alkyl, carboxy, alkoxycarbonyl, cyano, amido, aminoalkyl, alkoxy or alkylthio with the proviso that R2 cannot be aminoisoquinolyl;

each X independently is a C, N, O or S atom or a CO, 25  $CR_{1a}$ ,  $C(R_{1a})_2$  or  $NR_{1a}$  group, at least one X being C, CO,  $CR_{1a}$  or  $C(R_{1a})_2$ ;

each R<sub>1a</sub> independently represents hydrogen or hydroxyl, alkoxy, alkyl, aminoalkyl, hydroxyalkyl, alkoxyalkyl, alkoxycarbonyl, alkylaminocarbonyl, alkoxycarbonylamino, 30 acyloxymethoxycarbonyl or alkylamino optionally substituted by hydroxy, alkylamino, alkoxy, oxo, aryl or cycloalkyl;

 $R_1$  is as defined for  $R_{1a}$ , provided that  $R_1$  is not

unsubstituted aminoalkyl;

Y (the  $\alpha$ -atom) is a nitrogen atom or a  $CR_{1b}$  group;

Cy is a saturated or unsaturated, mono or poly cyclic, homo or heterocyclic group, optionally substituted by groups 5  $R_{3a}$  or  $R_{3i}X_{i}$ ;

each  $R_{3a}$  independently is  $R_{1C}$ , amino, halo, cyano, nitro, thiol, alkylthio, alkylsulphonyl, alkylsulphenyl, triazolyl, imidazolyl, tetrazolyl, hydrazido, alkylimidazolyl, thiazolyl, alkylthiazolyl, alkyloxazolyl, oxazolyl, alkylsulphonamido,

- 10 alkylaminosulphonyl, aminosulphonyl, haloalkoxy, haloalkyl, a group of the formula  $-C(X^3)N(R^{11})R^{12}$  (wherein  $X^3$  is 0 or S; and  $R^{11}$  and  $R^{12}$  are independently selected from hydrogen, methyl or ethyl or together with the nitrogen atom to which they are attached form a pyrrolidin-1-yl, piperidin-1-yl or
- 15 morpholino group), or -OCH2O- which is bonded to two adjacent ring atoms in Cy;

 $X_i$  is a bond, O, NH or  $CH_2$ ;

 $R_{3i}$  is phenyl, pyridyl or pyrimidinyl optionally substituted by  $R_{3a}$ ; and

20 R<sub>lb</sub>, R<sub>lc</sub> and R<sub>lj</sub> are as defined for R<sub>la</sub>;

L is an organic linker group containing 1 to 5 backbone atoms selected from C, N, O and S, or a branched alkyl or cyclic group; and

 $Lp(D)_n$  is of the formula:

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$$--X_{a}$$
  $X_{b}$   $--(L_{a})_{s}$   $--(G)_{t}$   $-(L_{b})_{u}$   $-R_{10}$ 

in which:

r is 1 or 2;

Xa is CH and Xb is N;

30 s, t and u are each 0 or 1;

 $L_a$  and  $L_b$  are each independently selected from a single bond, C=O, O and NR<sub>1e</sub>, in which R<sub>1e</sub> is hydrogen or (1-

6C) alkyl;

G is (1-6C) alkanediyl; and

R<sub>10</sub> is (1-6C) alkyl; (3-6C) cycloalkyl [which is unsubstituted or substituted by (1-6C)alkyl]; indanyl; 5 pyridyl; tetrahydropyranyl; tetrahydrothiopyranyl; phenyl {which is unsubstituted or substituted by one or two R3 groups [wherein R3 is hydrogen, hydroxyl, alkoxy, alkyl (optionally substituted by hydroxy, alkylamino, alkoxy, oxo, aryl or cycloalkyl), hydroxyalkyl (optionally substituted by hydroxy, 10 alkylamino, alkoxy, oxo, aryl or cycloalkyl), alkoxyalkyl, alkoxycarbonyl, alkylaminocarbonyl, alkoxycarbonylamino, acyloxymethoxycarbonyl, aminoalkyl (optionally substituted by hydroxy, alkylamino, alkoxy, oxo, aryl or cycloalkyl), alkylamino (optionally substituted by hydroxy, alkylamino, 15 alkoxy, oxo, aryl or cycloalkyl), amino, halo, cyano, nitro, thiol, alkylthio, alkylsulphonyl, alkylsulphenyl, triazolyl, imidazolyl, tetrazolyl, hydrazido, alkyl imidazolyl, thiazolyl, alkyl thiazolyl, alkyl oxazolyl, oxazolyl,

$$X_{c}$$
 $\xrightarrow{CH_{2}}$  $R_{11}$ 

alkylsulphonamido, alkylaminosulphonyl, aminosulphonyl,
20 haloalkoxy, or haloalkyll}, pyrrolinyl; or a group of formula:

in which v is 1,2 or 3; one of X<sub>C</sub> and X<sub>d</sub> is N and the other is CH or N (provided that when v is 1, X<sub>C</sub> and X<sub>d</sub> are not both N);

25 and R<sub>11</sub> is hydrogen, (1-6C)alkyl or when X<sub>d</sub> is CH, hydroxy(1-6C)alkyl; provided that when t is 0, the sum of s and u is 1; when X<sub>b</sub> is N, L<sub>a</sub> is a bond or C=O; when X<sub>C</sub> is N, L<sub>b</sub> is a bond or C=O; when X<sub>b</sub> and X<sub>c</sub> are both N, t is 1; and when (L<sub>a</sub>)<sub>s</sub>-(G)<sub>t</sub>-(L<sub>b</sub>)<sub>u</sub> represents an alkyl group and X<sub>b</sub> and X<sub>c</sub> both

30 represent N, the alkyl group contains at least two chain carbon atoms;

or R10 is hydrogen and s, t and u are each 0;

or the compound of formula (I) that is 4-{[4-methoxybenzoyl-D,L-(2-trifluoromethylthiophenyl)-glycinyl]aminomethyl}-1-isopropylpiperidine; or a physiologically-tolerable salt thereof.

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2. A serine protease inhibitor of formula (I):

$$R_2$$
 $X$ 
 $Y$ 
 $L$ 
 $Lp(D)_n$ 

10 wherein:

 $R_2$  is a 5 or 6 membered aromatic carbon ring optionally interrupted by a nitrogen, oxygen or sulphur ring atom, optionally being substituted in the 3 and/or 4 position (in relation to the point of attachement of X-X) by halo, nitro, 15 thiol, haloalkoxy, hydrazido, alkylhydrazido, amino, cyano, haloalkyl, alkylthio, alkenyl, alkynyl, acylamino, tri or difluoromethoxy, carboxy, acyloxy, MeSO2- or R1, or the substituents at the 3 or 4 positions taken together form a fused ring which is a 5 or 6 membered carbocyclic or 20 heterocyclic ring optionally substituted by halo, haloalkoxy, haloalkyl, cyano, nitro, amino, hydrazido, alkylthio, alkenyl, alkynyl or R11, and optionally substituted in the position alpha to the X-X group (i.e. 6 position for a six membered aromatic ring etc) by amino, hydroxy, halo, alkyl, carboxy, 25 alkoxycarbonyl, cyano, amido, aminoalkyl, alkoxy or alkylthio with the proviso that R2 cannot be aminoisoquinolyl;

each X independently is a C, N, O or S atom or a CO,  $CR_{1a}$ ,  $C(R_{1a})_2$  or  $NR_{1a}$  group, at least one X being C, CO,  $CR_{1a}$  or  $C(R_{1a})_2$ ;

each R<sub>la</sub> independently represents hydrogen or hydroxyl, alkoxy, alkyl, aminoalkyl, hydroxyalkyl, alkoxyalkyl, alkoxycarbonyl, alkylaminocarbonyl, alkoxycarbonylamino,

acyloxymethoxycarbonyl or alkylamino optionally substituted by hydroxy, alkylamino, alkoxy, oxo, aryl or cycloalkyl;

 $R_1$  is as defined for  $R_{1a}$ , provided that  $R_1$  is not unsubstituted aminoalkyl;

Y (the  $\alpha$ -atom) is a nitrogen atom or a CR<sub>1b</sub> group; Cy is a saturated or unsaturated, mono or poly cyclic, homo or heterocyclic group optionally substituted by groups R<sub>3a</sub> or phenyl optionally substituted by  $\dot{R}_{3a}$ ;

each R<sub>3a</sub> independently is R<sub>1C</sub>, amino, halo, cyano, nitro, 10 thiol, alkylthio, alkylsulphonyl, alkylsulphenyl, triazolyl, imidazolyl, tetrazolyl, hydrazido, alkyl imidazolyl, thiazolyl, alkyl thiazolyl, alkyl oxazolyl, oxazolyl, alkylsulphonamido, alkylaminosulphonyl, aminosulphonyl, haloalkoxy or haloalkyl; and

15 R<sub>1b</sub>, R<sub>1c</sub> and R<sub>1j</sub> are as defined for R<sub>1a</sub>; L is an organic linker group containing 1 to 5 backbone atoms selected from C, N, O and S, or a branched alkyl or cyclic group; and

 $Lp(D)_n$  is of the formula:

$$-X_{a}X_{b}-(L_{a})_{s}-(G)_{t}-(L_{b})_{u}-R_{10}$$

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in which:

r is 1 or 2;

Xa is CH and Xb is N;

s, t and u are each 0 or 1;

La and Lb are each independently selected from a single bond, C=0, O and NR<sub>1e</sub>, in which R<sub>1e</sub> is hydrogen or (1-6C) alkyl;

G is (1-6C)alkanediyl; and

R<sub>10</sub> is (1-6C)alkyl; (3-6C)cycloalkyl [which is unsubstituted or substituted by (1-6C)alkyl]; indanyl; pyridyl; tetrahydropyranyl; tetrahydrothiopyranyl; phenyl {which is unsubstituted or substituted by one or two R3 groups 5 [wherein R3 is hydrogen, hydroxyl, alkoxy, alkyl (optionally substituted by hydroxy, alkylamino, alkoxy, oxo, aryl or cycloalkyl), hydroxyalkyl (optionally substituted by hydroxy, alkylamino, alkoxy, oxo, aryl or cycloalkyl), alkoxyalkyl, alkoxycarbonyl, alkylaminocarbonyl, alkoxycarbonylamino, 10 acyloxymethoxycarbonyl, aminoalkyl (optionally substituted by hydroxy, alkylamino, alkoxy, oxo, aryl or cycloalkyl), alkylamino (optionally substituted by hydroxy, alkylamino, alkoxy, oxo, aryl or cycloalkyl), amino, halo, cyano, nitro, thiol, alkylthio, alkylsulphonyl, alkysulphenyl, triazolyl, 15 imidazolyl, tetrazolyl, hydrazido, alkyl imidazolyl, thiazolyl, alkyl thiazolyl, alkyl oxazolyl, oxazolyl, alkylsulphonamido, alkylaminosulphonyl, aminosulphonyl, haloalkoxy or haloalkyl] }, pyrrolinyl; or a group of formula:

20 in which v is 1, 2 or 3; one of X<sub>C</sub> and X<sub>d</sub> is N and the other
is CH or N, provided that when v is 1, X<sub>C</sub> and X<sub>d</sub> are not both
N; and R<sub>11</sub> is hydrogen, (1-6C)alkyl or when X<sub>d</sub> is CH,
hydroxy(1-6C)alkyl; provided that when t is 0, the sum of s
and u is 1; when X<sub>b</sub> is N, L<sub>a</sub> is a bond or C=O; when X<sub>C</sub> is N,
25 L<sub>b</sub> is a bond or C=O; when X<sub>b</sub> and X<sub>c</sub> are both N, t is 1; and
when (L<sub>a</sub>)<sub>S</sub>-(G)<sub>t</sub>-(L<sub>b</sub>)<sub>u</sub> represents and alkyl group and X<sub>b</sub> and X<sub>c</sub>
both represent N, the alkyl group contains at least two chain
carbon atoms,

or a physiologically-tolerable salt thereof.

30 3. A serine protease inhibitor according to claim 1 or claim

- 2, wherein R<sup>3</sup> is selected from hydrogen, hydroxyl, methoxy, ethoxy, methyl, ethyl, propyl, 2-propyl, butyl, 2-butyl, t-butyl, pentyl, 2-pentyl, 3-pentyl, isopropylaminomethyl, dimethylamino-methyl, diethylaminomethyl, dimethylaminoethyl,
- 5 acetyl, hydroxymethyl, hydroxyethyl, carboxy, carboxy(1-5C)alkyl, methoxymethyl, methoxycarbonyl, ethoxycarbonyl, methylaminocarbonyl, dimethylaminocarbonyl, aminomethyl, aminocarbonyl, aminocarbonyl(1-5C)alkyl, methylamino, dimethylamino, ethylamino, formylamino, acetylamino, amino,
- 10 fluoro, chloro, cyano, nitro, thiol, methylthio, methylsulphonyl, ethylsulphonyl, isopropylsulphonyl, methylsulphenyl,1,2,4-triazol-2-yl, 1,2,4-triazol-4-yl, 1,2,3-triazol-4-yl, 1,3-imidazol-1-yl,1,3-imidazol-4-yl, tetrazol-1-yl, tetrazol-5-yl, methylsulphonamido, ethylsulphonamido,
- propylsulphonamido, methylaminosulphonyl, ethylaminosulphonyl, propylaminosulphonyl, aminosulphonyl, trifluoromethoxy, trifluoromethyl and trichloromethyl.
- 4. A compound according to any of claims 1 to 3 wherein r is 20 2.
  - 5. A compound according to claim 1 wherein  $\operatorname{Lp}(D)_n$  is of the formula:

25 wherein:

q is 1 or 2;

 $R_S$  is hydrogen, -(CH<sub>2</sub>)<sub>C</sub>- $R_C$ , -CHR<sub>e</sub>R<sub>f</sub>, or -CH<sub>2</sub>-CHR<sub>e</sub>R<sub>f</sub> [c is 0, 1 or 2; wherein  $R_C$  is pyridyl or phenyl (which phenyl may bear a fluoro, chloro, methyl, CONH<sub>2</sub>, SO<sub>2</sub>NH<sub>2</sub>,

methylaminosulphonyl, dimethylaminosulphonyl, methylsulphonylamino, methoxy or methylsulphonyl substituent) and R<sub>e</sub> and R<sub>f</sub> are independently hydrogen or C<sub>1-3</sub>alkyl; or CHR<sub>e</sub>R<sub>f</sub> is (3-6C)cycloalkyl (which may bear a methyl, ethyl or hydroxymethyl substituent at the 3- or 4-position, provided the substituent is not bonded to the CH group which is bonded to L), tetrahydropyranyl, tetrahydrothiopyranyl, pyrrolidinyl (which may bear a 1-methyl substituent), piperidinyl (which may bear a 1-methyl substituent) (provided that the

10 tetrahydropyranyl, tetrahydrothiopyranyl, pyrrolidinyl and piperidinyl rings are not linked to the piperidin-1,4-diyl group through a ring nitrogen atom or a ring carbon atom adjacent to a ring oxygen, sulfur or nitrogen atom) or indan-2-yl].

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- 6. A compound according to any one of claims 1 to 5 wherein L is CONH,  $CH_2NHCO$ ,  $CONHCH_2$ ,  $CONHCH_2CH_2$  or  $CON(Me)CH_2$ .
- 7. A serine protease inhibitor according to claim 2 wherein  $-L-Lp(D)_n$  is of the formula:

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wherein

q is 1 or 2;

s is 0 or 1; and

 $R_{\rm S}$  is -(CH<sub>2</sub>)<sub>C</sub>-R<sub>C</sub>, -CHR<sub>e</sub>R<sub>f</sub>, or -CH<sub>2</sub>-CHR<sub>e</sub>R<sub>f</sub> [wherein c is 1 25 or 2; R<sub>C</sub> is pyridyl or phenyl (which phenyl may bear a fluoro, chloro, methyl, CONH<sub>2</sub>, SO<sub>2</sub>NH<sub>2</sub>, methylaminosulphonyl, dimethylaminosulphonyl, methylsulphonylamino, methoxy or methylsulphonyl substituent) and R<sub>e</sub> and R<sub>f</sub> are independently

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hydrogen or  $C_{1-3}$ alkyl; or  $CHR_eR_f$  is cyclopentyl (which may bear a methyl, ethyl or hydroxymethyl substituent at the 3- or 4-position), cyclohexyl (which may bear a methyl, ethyl or hydroxymethyl substitutent at the 3- or 4-position),

- 5 tetrahydropyran-4-yl, tetrahydrothiopyran-4-yl, pyrrolidin-3-yl (which may bear a 1-methyl substituent), piperidin-4-yl (which may bear a 1-methyl substituent), or indan-2-yl].
- 8. A compound according to any of claims 5 to 7 wherein q is 10 2.
  - 9. A compound according to claim 1 or claim 2 wherein  $\operatorname{Lp}(D)_n$  is selected from one of the following formulae:

indan-2-yl.

wherein m represents 0 or 1.

- 5 10. A compound according to any of claims 5 to 7 wherein R<sub>S</sub> is selected from: hydrogen, methyl, ethyl, prop-2-yl, but-2-yl, pent-3-yl, hept-4-yl, cyclopentyl, cyclohexyl, cyclohexylmethyl, 1-methylpiperidin-4-yl, tetrahydropyran-4-yl, tetrahydrothiopyran-4-yl, phenyl, benzyl, pyrid-2-yl, pyrid-3-yl, pyrid-3-yl, pyrid-4-ylmethyl and
- 11. A compound according to any one of claims 1 to 10 wherein R<sub>2</sub> is phenyl, thien-2-yl, naphthyl, indol-2-yl, indol-6-yl,
- 15 benzo[b]furan-5-yl, benzo[b]thiophen-2-yl or benzimidazol-2-yl (each of which is optionally substituted as defined in claim 1).
- 12. A compound according to any one of claims 1 to 11 wherein 20 optional substituents for R<sub>2</sub> are selected from: fluoro, chloro, bromo, iodo, nitro, thiol, difluoromethoxy, trifluoromethoxy, hydrazido, methylhydrazido, amino, cyano, trifluoromethyl, methylthio, vinyl, ethynyl, acetylamino, carboxy, acetoxy, hydroxy, methyl, ethyl, amido (CONH<sub>2</sub>), 25 aminomethyl, methoxy and ethoxy.
  - 13. A compound according to any one of claims 1 to 12 wherein  $R_2$  is selected from one of the formula (A') to (H'):

$$R_{14}$$
 $R_{15}$ 
 $R_{13}$ 
 $R_{14}$ 
 $R_{15}$ 
 $R$ 

wherein  $X_4$  is 0 or S,  $R_{13}$  is selected from hydrogen, fluoro, chloro or methyl and  $R_{14}$  is selected from hydrogen, methyl, ethyl, fluoro, chloro, and methoxy and  $R_{15}$  is selected from hydrogen, methyl, fluoro, chloro and amino.

14. A compound according to claims 1 to 13, wherein R<sub>2</sub> is 4methoxyphenyl, 3-amino-4-chlorophenyl, indol-2-yl, 5chloroindol-2-yl, indol-6-yl, 3-chloroindol-6-yl or 310 methylindol-6-yl.

15. A compound according to any one of claims 1 to 14 wherein -X-X- is -CONH-.

- 16. A compound according to any one of claims 1 to 15 wherein Y is CH.
- 5 17. A compound according to any one of claims 1 to 16 wherein Cy is an optionally R<sub>3a</sub> substituted: phenyl, pyridyl, thienyl, thiazolyl, naphthyl, piperidinyl, furanyl, pyrrolyl, isoxazolyl, isothiazolyl, pyrazolyl, oxazolyl, imidazolyl, 1,2,4-thiadiazolyl, 1,3,4-thiadiazolyl, pyrimidinyl,
- 10 pridazinyl, quinolyl, isoquinolyl, benzofuryl, benzothienyl or cycloalkyl group, or a phenyl group substituted by  $R_{3i}X_i$  in which  $X_i$  is a bond, O, NH or  $CH_2$  and  $R_{3i}$  is phenyl, pyridyl or pyrimidinyl optionally substituted by  $R_{3a}$ .
- 15 18. A compound according to any one of claims 1 to 17 wherein Cy is an optionally R<sub>3a</sub> substituted: phenyl, pyridyl, thienyl, thiazolyl, naphthyl, piperidinyl or cycloalkyl group.
- 19. A compound according to any one of claims 1 to 18 wherein 20 R<sub>3a</sub> is selected from hydrogen, hydroxyl, alkoxy, alkyl (optionally substituted by hydroxy, alkylamino, alkoxy, oxo, aryl or cycloalkyl), aminoalkyl (optionally substituted by hydroxy, alkylamino, alkoxy, oxo, aryl or cycloalkyl), hydroxyalkyl (optionally substituted by hydroxy, alkylamino,
- 25 alkoxy, oxo, aryl or cycloalkyl), alkoxyalkyl, alkoxycarbonyl, alkylaminocarbonyl, alkoxycarbonylamino, alkylamino (optionally substituted by hydroxy, alkylamino, alkoxy, oxo, aryl or cycloalkyl), for amino, halo, cyano, nitro,thiol, alkylthio, alkylsulphonyl, alkylsulphonyl, alkylsulphonamido,
- 30 alkylaminosulphonyl, aminosulphonyl, haloalkoxy, haloalkyl, a group of the formula  $-C(X^3)N(R^{11})R^{12}$  (wherein  $X^3$  is 0 or S; and  $R^{11}$  and  $R^{12}$  are independently selected from hydrogen, methyl or ethyl or together with the nitrogen atom to which they are attached form a pyrrolidin-1-yl, piperidin-1-yl or

morpholino group) and  $-\text{OCH}_2\text{O-}$  which is bonded to two adjacent ring atoms in Cy.

- 20. A compound according to any one of claims 1 to 19 wherein 5 R<sub>3a</sub> is selected from hydrogen, hydroxyl, alkoxy, alkyl (optionally substituted by hydroxy, alkylamino, alkoxy, oxo, aryl or cycloalkyl), hydroxyalkyl (optionally substituted by hydroxy, alkylamino, alkoxy, oxo, aryl or cycloalkyl), alkoxyalkyl, alkoxycarbonyl, alkylaminocarbonyl,
- 10 alkoxycarbonylamino, alkylamino (optionally substituted by hydroxy, alkylamino, alkoxy, oxo, aryl or cycloalkyl), aminoalkyl (substituted by hydroxy, alkylamino, alkoxy, oxo, aryl or cycloalkyl), halo, cyano, nitro, thiol, alkylthio, alkylsulphonyl, alkylsulphonamido,
- 15 alkylaminosulphonyl, aminosulphonyl, haloalkoxy and haloalkyl.
  - 21. A compound according to any one of claims 1 to 19 wherein  $R_{3a}$  is selected from hydrogen, hydroxyl, methoxy, ethoxy, methyl, ethyl, methylaminomethyl, dimethylaminomethyl,
- 20 hydroxymethyl, carboxy, methoxymethyl, methoxycarbonyl, ethoxycarbonyl, methylaminocarbonyl, dimethylamino-carbonyl, aminomethyl, CONH<sub>2</sub>, CH<sub>2</sub>CONH<sub>2</sub>, acetylamino, methoxycarbonylamino, ethoxycarbonylamino, t-butoxycarbonylamino, amino, fluoro, chloro, bromo, cyano,
- 25 nitro, thiol, methylthio, methylsulphonyl, ethylsulphonyl,
   methylsulphenyl, methylsulphonylamido, ethylsulphonylamido,
   methylaminosulphonyl, ethylaminosulphonyl, aminosulphonyl,
   trifluoromethoxy, trifluoromethyl, pyrrolidin-1-ylcarbonyl,
   piperidin-1-ylcarbonyl, morpholin-1-ylcarbonyl and -OCH2O30 (which is bonded to two adjacent ring atoms in Cy).
  - 22. A compound according to any one of claims 1 to 19 wherein  $R_{3a}$  is selected from hydrogen, hydroxyl, methoxy, ethoxy, methyl, ethyl, methylaminomethyl, dimethylaminomethyl,

hydroxymethyl, carboxy, methoxymethyl, methoxycarbonyl, ethoxycarbonyl, methylaminocarbonyl, dimethylamino-carbonyl, aminomethyl, CONH<sub>2</sub>, CH<sub>2</sub>CONH<sub>2</sub>, acetylamino, methoxycarbonylamino, ethoxycarbonylamino, t-

5 butoxycarbonylamino, amino, fluoro, chloro, cyano, nitro, thiol, methylthio, methylsulphonyl, ethylsulphonyl, methylsulphenyl, methylsulphonylamido, ethylsulphonylamido, methylaminosulphonyl, ethylaminosulphonyl, aminosulphonyl, trifluoromethoxy and trifluoromethyl.

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23. A compound according to any one of claims 1 to 22 wherein Cy is selected from:

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wherein:

X' is selected from O, S and NMe; X'' is selected from O and S; OCHARA CEANE

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X''' is selected from O, S, NH and NMe;

Y' is selected from hydrogen, amino and methyl;

 $R_{\rm O}$  is selected from hydrogen, methyl, fluoro, chloro, trifluoromethyl, methoxy, methylthio, methylsulphinyl and 5 methylsulphonyl;

R<sub>m</sub> is selected from hydrogen, methyl, fluoro, chloro, trifluoromethyl, methoxy, methylthio, methylsulphinyl, methylsulphonyl, carboxy, methoxycarbonyl and a group of the formula -C(X<sup>3</sup>)N(R<sup>11</sup>)R<sup>12</sup> (wherein X<sup>3</sup> is O or S and R<sup>11</sup> and R<sup>12</sup>

10 are independently selected from hydrogen, methyl or ethyl or together with the nitrogen atom to which they are attached form a pyrrolidin-1-yl, piperidin-1-yl or morpholino group); R<sub>p</sub> is selected from hydrogen and fluoro; or R<sub>O</sub> and R<sub>m</sub> or R<sub>m</sub> and R<sub>p</sub> form an -OCH<sub>2</sub>O- group; or

15 R<sub>O</sub> and R<sub>m</sub> together with the ring to which they are attached form a 5 or 6 membered aryl or heteroaryl ring (wherein the heteroary ring contains 1 or 2 heteroatoms selected from nitrogen, oxygen and sulfur);

one of  $R_{O1}$  and  $R_{O2}$  is hydrogen and the other is  $R_{O}$ ;

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- 24. A compound according to any one of claims 1 to 19 wherein Cy is selected from phenyl, 2-chlorophenyl, 2-methoxyphenyl, 4-carbamoylphenyl, pyrid-2-yl, pyrid-3-yl, thien-2-yl, thien-3-yl, furan-2-yl, furan-3-yl, imidazol-2-yl, thiazol-2-yl,
- 25 thiazol-4-yl, thiazol-5-yl, naphthyl, isoquinolin-5-yl, isoquinolin-8-yl, quinolin-4-yl, quinolin-5-yl, and quinolin-8-yl.
- 25. A compound as claimed in any one of Claims 1 to 24, in 30 which the alpha atom in Y is carbon and has the conformation that would result from construction from a D- $\alpha$ -aminoacid NH<sub>2</sub>-CR<sub>1b</sub>(Cy)-COOH where the NH<sub>2</sub> represents part of X-X
  - 26. A pharmaceutical composition, which comprises a compound

as claimed in any one of claims 1 to 25 together with at least one pharmaceutically acceptable carrier or excipient.

- 27. A compound as claimed in any one of claims 1 to 25 for 5 use in therapy.
  - 28. Use of a compound as claimed in any one of claims 1 to 25 for the manufacture of a medicament for the treatment of a thrombotic disorder.

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29. A method of treatment of a human or non-human animal body to combat a thrombotic disorder, which comprises administering to said body an effective amount of a compound as claimed in claim 1.

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- 30. A pharmaceutical composition comprising a compound as claimed in any one of claims 1 to 25 for use to combat a thrombotic disorder.
- 20 31. A compound of formula I as claimed in claim 1 and named in any of the Examples herein, or a physiologically-tolerable salt thereof.